

divided into Minutes and halves, which will be so magnified by the Eye Glass, that it will be easy to distinguish the time to a few seconds.

I must confess there is some difficulty in fixing up this Instrument, and when it is so, to keep it from varying from its true position, yet 'tis not insuperable; but for small instruments of about 2 or 3 foot long, there cannot be, I think, a more accurate, facile, and expeditious way than this for the drawing a Meridian Line. Now whether the many benefits that may accrue to Astronomy, do not make the larger one worthy of the charge and trouble that there may be in completing it, I shall leave, Sir, to yours and the rest of the Illustrious Society's consideration; to whose service I am most humbly devoted.

Stephen Gray.

VI. *A Letter from Dr Martin Lister, F. R. S.  
to Dr Tancred Robinson, F. R. S. concerning  
pouder'd Blues passing the lacteal Veins, &c.  
Leatherhead, May 2. 1701.*

WHEN I was the other day in Town, I was shewn by you a most ingenious little Tract of Fevers: which I read over with delight. I confess, for want of Mathematicks, I could not well enter into some of his reasonings. However, in the main, as far as I could be judge, he is much in the right, that most, if not all Fevers proceed from the obstruction of the Glands.

But the occasion of my writing this Letter to you, is the paragraph I met with page 54 of that Book: in which an experiment of mine (very many years ago published,

light, and in the success of which I thought my self very happy) is not fairly represented : as, I suppose, standing too much in his way ; and therefore is removed, and passed over by him, as if not done by me, or at best mistaken. However, my good fortune is, to have had it afterwards experimented at *Oxford* by *Dr Musgrave* with a surprizing success ; viz. that a Dog kept long fasting, would not only admit into the Lacteals a tinctured liquor, but a very substantial one, such as powder'd Blue.

And therefore to account for Fevers, and the obstruction of the Glands, we must admit of crude, and otherwise vitiated Chyle, as well, if not oftner, than the external accidents of a cold and heat, and the disorderly temperature of the air.

I was ever greatly averse to criticize, being the unmannerly (not to say worse) vice of the age ; I am content every one should enjoy his own sense in the interpretation of Nature : but in this I could not but do my self justice ; the manner and success of the experiment being so fully and circumstantially delivered by me and *Dr Musgrave*.

The Transactions are single Tracts, and have been very uncertainly published, so as this Gentleman might not have seen some of the former, or forgot the passages relating to this experiment : That which makes me believe he hath not read them all, is that p. 10. he hath assigned the ordinary quantity of blood in a humane body to be 20 pound, according to that groundless and most extravagant guess of *Dr Lower* : Whereas if he had perused them all, he would have found a most certain proof by *Dr Molins*, that the blood of all animals is but as 1 to 20 of their weight : and therefore that of man, at a medium or ordinarily, not to exceed 8 pound. I am

S I R,

Your most humble Servant,

Martin Lister.